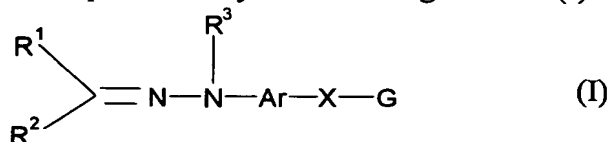


## CLAIMS

1. A compound represented by the following formula (I):



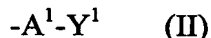
wherein  $\text{R}^1$  and  $\text{R}^2$  each independently represents hydrogen, alkyl, alkenyl, alkynyl, aralkyl, amino, alkylamino, cyano, halogen, halogenoalkyl, halogenoalkenyl, halogenoalkynyl, carboxyl, alkoxycarbonyl, carbamoyl, *N*-alkylcarbamoyl, *N,N*-dialkylcarbamoyl, *N*-hydroxyalkylcarbamoyl, aryl which may have a substituent, a saturated or unsaturated 5- to 7-membered heterocyclic group which may have a substituent, a saturated or unsaturated bicyclic or tricyclic condensed heterocyclic group which may have a substituent, arylalkenyl which may have a substituent, saturated or unsaturated hetero ring-alkenyl which may have a substituent, or saturated or unsaturated bicyclic or tricyclic condensed hetero ring-alkenyl which may have a substituent, wherein the substituent is one substituent or 2 or 3 substituents, which are the same or different, selected from the following

Group (A):

Group (A):

halogen, hydroxyl, alkyl, alkoxy, halogenoalkyl, cyano, nitro, hydroxyalkyl, carboxyl, alkoxycarbonyl, carboxyalkoxy, alkoxycarbonylalkoxy, aralkyloxy, *N*-alkylaminoalkylcarbonyl, *N,N*-dialkylaminoalkylcarbonyl, carboxyalkyl, alkoxycarbonylalkoxy, morpholinocarbonylalkoxy, mercapto, alkylthio, aminosulfonyl, *N*-alkylaminosulfonyl, *N,N*-dialkylaminosulfonyl, sulfo, alkylsulfonyl, alkylsulfonylalkyl, tetrazolyl, trialkyltin, trialkylsilyl, aminosulfonylalkyl, *N*-alkylaminosulfonylalkyl, *N,N*-dialkylaminosulfonylalkyl, aralkyl, alkylsulfonylamino, *N*-alkylaminosulfonylamino, *N,N*-dialkylaminosulfonylamino, *N*-alkylaminoacylamino, *N,N*-dialkylaminoacylamino,

a group represented by the following formula (II):



wherein  $\text{A}^1$  represents a single bond or linear, branched or cyclic alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl; and  $\text{Y}^1$  represents a saturated or unsaturated 5- to 7-membered heterocyclic group which may have a substituent,

wherein the substituent on  $\text{Y}^1$  is one substituent or 2 or 3 substituents, which are the same or different, selected from the group consisting of halogen, alkyl, halogenoalkyl, carboxyl, alkoxycarbonyl, aminoalkyl, *N*-alkylamino, *N,N*-dialkylamino, *N*-alkylaminoalkyl, *N,N*-dialkylaminoalkyl, *N*-alkyl-*N*-alkoxycarbonylamino and *N*-alkyl-*N*-alkoxycarbonylaminoalkyl,

a group represented by the following formula (III)



wherein  $A^2$  represents a single bond, linear, branched or cyclic alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, or linear, branched or cyclic-O-alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, in which the alkylene binds to the carbonyl in the group; and  $Y^2$  represents a saturated or unsaturated 5- to 7-membered heterocyclic group which may have a substituent,

wherein the substituent on  $Y^2$  represents one substituent or 2 or 3 substituents, which are the same or different, selected from the group consisting of halogen, alkyl, halogenoalkyl, carboxyl, alkoxycarbonyl, aminoalkyl, *N*-alkylamino, *N,N*-dialkylamino, *N*-alkylaminoalkyl, *N,N*-dialkylaminoalkyl, *N*-alkyl-*N*-alkoxycarbonylamino and *N*-alkyl-*N*-alkoxycarbonylaminoalkyl,

a group represented by the following formula (IV)



wherein  $A^3$  represents a single bond, linear, branched or cyclic alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, linear, branched or cyclic-O-alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, in which the alkylene binds to the nitrogen atom in the group, or linear, branched or cyclic-(C=O)-alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, in which the alkylene binds to the nitrogen atom in the group; and  $R^4$  and  $R^5$  each independently represents hydrogen, alkyl, hydroxyalkyl, halogenoalkyl, acyl, alkoxycarbonyl, alkylsulfonyl, *N*-alkylaminosulfonyl, *N,N*-dialkylaminosulfonyl, *N*-alkylaminoalkylcarbonyl, *N,N*-dialkylaminoalkylcarbonyl or alkyl-diphenylsilyloxyalkyl, and

a group represented by the following formula (V)



wherein  $A^4$  represents a single bond, linear, branched or cyclic alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, or linear, branched or cyclic-O-alkylene having from 1 to 6 carbon atoms which may be substituted with halogen or hydroxyl, in which the alkylene binds to the carbonyl in the group; and

$R^6$  and  $R^7$  each independently represents hydrogen, alkyl, hydroxyalkyl, halogenoalkyl, acyl, alkoxycarbonyl, alkylsulfonyl, *N*-alkylaminosulfonyl, *N,N*-dialkylaminosulfonyl, *N*-alkylaminoalkylcarbonyl, *N,N*-dialkylaminoalkylcarbonyl or alkyl-diphenylsilyloxyalkyl;

$R^3$  represents hydrogen, alkyl which may have substituent, acyl or alkoxycarbonyl;

Ar represents a divalent group derived from aromatic hydrocarbon, a saturated or unsaturated 5- to 7-membered hetero ring or a saturated or unsaturated bicyclic or tricyclic condensed hetero ring, which may have one substituent or 2 or 3 substituents, which are the same or different, selected from the following Group (B):

Group (B):

halogen, hydroxyl group, alkyl, alkoxy, halogenoalkyl, cyano, amino, nitro, alkylamino, hydroxyalkyl, carboxyl, alkoxycarbonyl, carbamoyl, mercapto, alkylthio, aminosulfonyl, *N*-alkylaminosulfonyl, *N,N*-dialkylaminosulfonyl, sulfo, trialkyltin and trialkylsilyl;

X represents a single bond, linear or branched alkylene having from 1 to 3 carbon atoms which may have a substituent, linear or branched alkenylene having from 1 to 3 carbon atoms which may have a substituent, linear or branched alkynylene having from 1 to 3 carbon atoms which may have a substituent or carbonyl; and

G represents halogen, halogenoalkyl, halogenoalkenyl, halogenoalkynyl, alkoxy, alkoxycarbonyl, *N*-alkylamino, *N,N*-dialkylamino, a saturated or unsaturated 5- or 6-membered cyclic hydrocarbon group which may have a substituent, a saturated or unsaturated bicyclic or tricyclic condensed hydrocarbon group which may have a substituent, a saturated or unsaturated 5- to 7-membered heterocyclic group which may have a substituent, or a saturated or unsaturated bicyclic or tricyclic condensed heterocyclic group which may have a substituent, wherein the substituent represents one substituent or 2 or 3 substituents, which are the same or different, selected from the following Group (C):

Group (C):

halogen, hydroxyl, alkyl, alkoxy, halogenoalkyl, halogenoalkenyl, halogenoalkoxy, cyano, amino, nitro, *N*-alkylamino, *N,N*-dialkylamino, *N*-alkylaminoalkyl, *N,N*-dialkylaminoalkyl, hydroxyalkyl, carboxyl, carboxyalkyl, alkoxycarbonyl, carbamoyl, mercapto, alkylthio, aminosulfonyl, *N*-alkylaminosulfonyl, *N,N*-dialkylaminosulfonyl, oxo, trialkyltin and trialkylsilyl,

a salt thereof or a solvate thereof.

2. The compound represented by formula (I) according to claim 1,  $R^1$  and  $R^2$  each independently is hydrogen, alkyl, amino, cyano, halogen, halogenoalkenyl, carboxyl, alkoxycarbonyl, carbamoyl, *N,N*-dialkylcarbamoyl, *N*-hydroxyalkylcarbamoyl, aryl which may have a substituent, a saturated or unsaturated 5- to 7-membered heterocyclic group which may have a substituent, or a saturated or unsaturated bicyclic or tricyclic condensed heterocyclic group which may have a substituent, a salt thereof or a solvate thereof.

3. The compound represented by formula (I) according to claim 1 or 2, wherein  $R^3$  is hydrogen, a salt thereof or a solvate thereof.

4. The compound represented by formula (I) according to any one of claims 1 to 3, wherein Ar is phenylene, a salt thereof or a solvate thereof.

5. The compound represented by formula (I) according to any one of claims 1 to 4, wherein X is a single bond or linear or branched alkylene having from 1 to 3 carbon atoms which may have a substituent, a salt thereof or a solvate thereof.

6. The compound represented by formula (I) according to any one of claims 1 to 5, wherein G is halogen, halogenoalkenyl, alkoxy, alkoxycarbonyl, *N,N*-dialkylamino, a saturated or unsaturated 5- or 6-membered cyclic hydrocarbon group which may have a substituent, or a saturated or unsaturated 5- to 7-membered heterocyclic group which may have a substituent, a salt thereof or a solvate thereof.

7. The compound represented by formula (I) according to any one of claims 1 to 6, wherein any one of  $R^1$ ,  $R^2$ ,  $R^3$ , Ar and G is labeled with a radiation-releasing isotope, a salt thereof or a solvate thereof.

8. The compound represented by formula (I) according to claim 7, wherein the radiation-releasing isotope is a radioactive iodine atom, a salt thereof or a solvate thereof.

9. A medicament which comprises the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof.

10. A pharmaceutical composition which comprises the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof, and a pharmaceutically acceptable carrier.

11. An agent for inhibiting aggregation and/or deposition of an amyloid protein or an amyloid-like protein, which comprises the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof.

12. An agent for inhibiting and/or treating a conformation disease, which comprises the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof.

13. An agent for preventing and/or treating a disease caused by accumulation of amyloid, which comprises the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof.

14. An agent for preventing and/or treating Alzheimer disease, Down syndrome, Creutzfeldt-Jacob disease, diabetes mellitus type II, dialysis amyloidosis, AA amyloidosis, Gerstmann Straussler Scheinker syndrome, Maxwell's syndrome, localized atrial amyloid, medullary carcinoma of thyroid, skin amyloidosis, localized nodular amyloidosis, AL amyloidosis, AH amyloidosis, familial amyloid polyneuropathy, senile systemic amyloidosis, cerebrovascular amyloidosis, familial Mediterranean fever, Parkinson disease, tauopathy, ALS or CAG repeat disease, which comprises the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof.

15. A radioactive diagnosing agent, which comprises the compound represented by formula (I) according to claim 7 or 8, a salt thereof or a solvate thereof.

16. A method for inhibiting and/or treating a conformation disease, which comprises administering the compound represented by formula (I) according to claim 1, a salt thereof or a solvate thereof.

17. A method for preventing and/or treating a disease caused by accumulation of amyloid, which comprises the compound represented by formula (I) according to claim 1, a salt thereof or a solvate thereof.

18. A method for preventing and/or treating Alzheimer disease, Down syndrome, Creutzfeldt-Jacob disease, diabetes mellitus type II, dialysis amyloidosis, AA amyloidosis, Gerstmann Straussler Scheinker syndrome, Maxwell's syndrome, localized atrial amyloid, medullary carcinoma of thyroid, skin amyloidosis, localized nodular amyloidosis, AL amyloidosis, AH amyloidosis, familial amyloid polyneuropathy, senile systemic amyloidosis, cerebrovascular amyloidosis, familial Mediterranean fever, Parkinson disease, tauopathy, ALS or CAG repeat disease, which comprises administering the compound represented by formula (I) according to claim 1, a salt thereof or a solvate thereof.

19. A method for diagnosing accumulation of amyloid, which comprises administering the compound represented by formula (I) according to claim 7, a salt thereof or a solvate thereof; and detecting a radiation-releasing isotope.

20. Use of the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof for the manufacture of an agent for inhibiting and/or treating a conformation disease, which comprises.

21. Use of the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof for the manufacture of an agent for preventing and/or treating a disease caused by accumulation of amyloid.

22. Use of the compound represented by formula (I) according to any one of claims 1 to 8, a salt thereof or a solvate thereof for the manufacture of an agent for preventing and/or treating Alzheimer disease, Down syndrome, Creutzfeldt-Jacob disease, diabetes mellitus type II, dialysis amyloidosis, AA amyloidosis, Gerstmann Straussler Scheinker syndrome, Maxwell's syndrome, localized atrial amyloid, medullary carcinoma of thyroid, skin amyloidosis, localized nodular amyloidosis, AL amyloidosis, AH amyloidosis, familial amyloid polyneuropathy, senile systemic amyloidosis, cerebrovascular amyloidosis, familial Mediterranean fever, Parkinson disease, tauopathy, ALS or CAG repeat disease.

23. Use of the compound represented by formula (I) according to claim 7 or 8, a salt thereof or a solvate thereof for the manufacture of an radioactive diagnosing agent.